

## REMARKS/ARGUMENTS

### A. Status of the Claims

- Claims 1-36 are pending in this application
- Claims 1-36 have been rejected by the Examiner

Applicant has amended claims 1, 3, 8-12, 14-16, 19, 24-27 and 29-36 and canceled claims 4 and 21 without prejudice and without acquiescence to clarify the present claimed invention. Applicant has also added new claim 37, which claims material contained in original claim 9. Applicant has attached as Appendix A a marked-up version of the claims showing the amendments contained herein. Also, for the convenience of the Examiner, Applicant has attached as Appendix B a clean copy of the pending claims with the amendments contained herein. No new matter has been added.

The issues outstanding in this application are as follows:

- Claims 1-36 have been rejected by the Examiner under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims in US Patent No. 6,287,254.
- Claim 9 has been rejected by the Examiner under 35 U.S.C. 112, second paragraph as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Claims 1-36 have been rejected by the Examiner under 35 U.S.C. 102(e) as being allegedly anticipated by Luciano, U.S. Patent No. 6,063,028.
- Claims 1-36 have been rejected by the Examiner under 35 U.S.C. 103(c) as being allegedly unpatentable over Luciano, US Patent No. 6,063,028 in view of Szabo U.S. Patent No. 5,954,640.

Applicants respectfully traverse the outstanding rejections and Applicants respectfully request reconsideration and withdrawal thereof in light of the amendments and remarks contained herein.

B. Obviousness-type Double Patenting Rejections

Claims 1-36 were rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 1-4, 6, 9, and 12-13 of U.S. Patent No. 6,287,254.

These rejections are traversed. Applicant notes that the '254 patent has an apparent patent term through November 2, 2019. A patent issuing from the present application would normally expire on October 15, 2019. Therefore, applicant expects no loss in patent term as a result of filing a terminal disclaimer in the present application. Without agreeing to the substance of the Examiner's rejection and in the interest of expediting the prosecution, Applicants submit herewith a terminal disclaimer over the '254 patent.

C. 35 U.S.C. § 112, second paragraph

The Office Action has rejected claim 9 because the term "preferably" is considered vague and indefinite. Applicant respectfully traverse

In order to advance the prosecution of the present application, Applicant has amended claim 9 without prejudice and without acquiescence to clarify the claimed subject matter. In light of this amendment, Applicants respectfully request withdrawal of the rejection.

D. 35 U.S.C. § 102(e)

Claims 1-36 were rejected under 35 U.S.C. § 102(e) as being anticipated by Luciano. According to the Examiner, Luciano discloses a system and method for communicating a health profile of an animal that includes genetic and health assessment data. Applicant traverses.

In order to anticipate a claim, the reference must teach each and every element as set forth in the claim. *Verdegaal Bros. V. Union Oil Col. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Luciano teaches a method of predicting the response of a human patient to a specific treatment, such as treatment for depression, using a symptom profile and a symptom profile in response to a treatment regimen. Luciano does not teach a system or method for communicating phenotypic and genotypic data relating to a non-human

animal. Yet further, Luciano does not teach a system or method for analyzing phenotypic or genotypic data relating to a non-human animal.

If Luciano does not teach a system or method for communicating phenotypic and genotypic data relating to a non-human animal, then Luciano can not anticipate the present invention. Thus, the rejection of claims 1-36 is improper, and withdrawal of the rejection is respectfully requested.

E. 35 U.S.C. § 103(a)

Claims 1-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Luciano in view of Szabo. According to the Examiner, it would have been obvious to one at the time to combine the health-profiling device of Luciano with the procurement of payment via credit cards over the Internet as described by Szabo. Applicant traverses.

1. Must teach and/or suggest all claim limitations.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Luciano teaches a method of predicting the response of a human patient to a specific treatment, such as treatment for depression, using a symptom profile and a symptom profile in response to a treatment regimen. Luciano does not teach nor does it suggest a system or method for communicating or analyzing phenotypic and genotypic data relating to a non-human animal. Thus, the rejection is improper and Applicant respectfully requests the rejection to be withdrawn.

2. Lack of suggestion to Combine references.

“When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on was evidence of obviousness.” *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). Thus, since the Examiner’s reason to combine the references was based upon the Examiner’s misunderstanding of the teachings of Luciano, Applicant asserts that this rejection is moot and respectfully requests that the rejection be withdrawn.



In view of the amendments and arguments contained herein, Applicant respectfully requests that the rejection be withdrawn.

**CONCLUSION**

Claims 1-36 are pending in this application. Applicant has amended claims 1, 3, 8-12, 14-16, 19, 24-27 and 29-36 and canceled claims 4 and 21 without prejudice and without acquiescence to clarify the present claimed invention. Applicant has also added new claim 37, which claims material contained in original claim 9.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2375, under Order No. HO-P02414US0 from which the undersigned is authorized to draw.

Dated: August 7, 2002

Respectfully submitted,

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Appendix A

**Version With Markings to Show Changes Made**

1. (Amended Once) A method of communicating data-phenotypic and genotypic data related to the genetic data of an animal together with the health assessment data related to that-a non-human animal, the data communication being between a central database processing resource and at least one remote user, the method comprising the steps of:

receiving an access request message from a remote user via a communications link;

transmitting an access enabling message to the remote user via the communications link wherein the remote user is authorized to access the database, the access enabling message permitting the remote user to access the database and access designated data from the database, the data in the database including biological laboratory test data relating to the health assessment of an animal together with the geneticphenotypic and genotypic data related to that-the animal-whose health assessment is accessed;

analyzing the phenotypic and genotypic data related to the animal;

compiling a report based on the analysis of the phenotypic and genotypic data of the animal; and

compiling a report from the accessed database, the report including the health assessment data of an animal together with the genetic data related to that animal; and

transmitting the compiled report of the health assessment data of the animal and geneticphenotypic and genotypic data of that-the animal to the remote user.

3. (Amended Once) The method of claim 1, including periodically updating the database with at least one of the laboratory test data or geneticphenotypic or genotypic data about the animal.

8. (Amended Once) The method of claim 1, including interpreting the phenotypic and genotypic combining genetic data of the animals with health assessment data of animals thereby to permit an analysis predicting health, disease probabilities, and disorder probabilities and-or longevity of selected-the animals.

9. (Amended Once) The method of claim 1, including sending an access request message from the remote user via a communications link, and the communications link is selectively a computer network, ~~preferably including the Internet.~~

10. (Amended Once) The method of claim 1, including receiving a biological specimen results of a subjectthe animal, storing, retrieving, comparing, and analyzing the biological specimen thereby ~~to obtaining the health assessment~~phenotypic data of the animal.

11. (Amended Once) The method of claim 1, including encrypting the ~~health assessment data and the~~phenotypic and genotypic genetic data.

12. (Amended Once) The method of claim 1, including the steps of communicating between a remote user and the central database processing resource through a computer network, providing credit card information of the remote user prior to providing at least one of ~~health assessment data and~~phenotypic or genotypic genetic data of the animal and transferring such data to the remote user after charging a credit card for such data.

14. (Amended Once) A method of viewing phenotypic and genotypic data related to a non-human animal comprising the steps of:

viewing, using a computer, both  
phenotypic data ~~for an animal, the phenotypic data including health assessment data, and~~

genotypic data ~~about the~~ for a non-human animal, ~~the genotypic data including genetic data,~~

analyzing, using a computer, the phenotypic data and the genotypic data based on predetermined characteristics; and

reporting the analysis of the ~~combined~~ phenotypic data and genotypic data.

15. (Amended Once) The method of claim 14, including receiving in a database of a central database processing resource related to the computer, data relating to the phenotype data of the ~~selected~~ animal and receiving in the database of the central data processing resource, genotypic data relating to the breed of the animal and background of the animal ~~which is health assessed.~~

16. (Amended Once) The method of claim 14, wherein a remote user of a database including ~~the~~ phenotypic data and genetic-genotypic data pays for at least one of an analysis of phenotypic or genotypic data ~~health assessment and genomic mapping and genetic screening~~ through a computer network, and including submitting the report to a remote user after receipt of the payment.

19. (Amended Once) Apparatus for ~~communicating data related to the genetic data of an animal together with health assessment~~ phenotypic and genotypic data related to ~~that a non-human~~ animal, comprising

a computer communication network for data communication being between a central database processing resource and at least one remote user,

means for receiving an access request message from a remote user via the communications link;

means for transmitting an access enabling message to the remote user via the communications link wherein the remote user is authorized to access the database, the access enabling message permitting the remote user to access the database and access designated data from the database, the data in the database including ~~biological laboratory test data relating to a health assessment of an animal and genetic~~ phenotypic and genotypic data related to the animal ~~whose health assessment is accessed~~;

means for analyzing the phenotypic and genotypic data related to the animal;

means for compiling a report based on the analysis phenotypic and genotypic data of the animal; and

~~means for compiling a report from the accessed database, the report including the health assessment data together with the genetic data related to that animal; and~~

means for the communication network transmitting the compiled report of the health assessment data of the animal and genetic phenotypic and genotypic data of ~~that the~~ animal to the remote user.

24. (Amended Once) The apparatus of claim 19, including means for interpreting the phenotypic and genotypic data ~~combining genetic data of animals with health assessment data of animals~~, and means to permit an analysis of the interpreted data thereby predicting

health, disease probabilities, ~~and~~ disorder probabilities ~~and or~~ longevity of ~~selected the~~ animals.

25. (Amended Once) The apparatus of claim 19, including means of communicating between a remote user and the central database processing resource through a computer network, means for providing credit card information of the remote user prior to providing at least one of ~~health assessment data and/or genetic~~ phenotypic or genotypic data and transferring such data to the remote user after charging a credit card for such data.

26. (Amended Once) Apparatus comprising  
a screen for monitoring, using a computer, both  
phenotypic data ~~for an animal, the phenotypic data including health~~  
~~assessment data, and~~  
genotypic data ~~about the animal~~ for a non-human animal ~~the genotypic data~~  
~~including genetic data,~~  
a computer for analyzing the phenotypic data and the genotypic data based on  
predetermined characteristics; and  
a communications network for reporting the analysis of the ~~combined~~  
phenotypic data and genotypic data.

27. (Amended Once) The apparatus of claim 26, including means for receiving in a database of a central database processing resource, phenotypic data relating to the health assessment of ~~a selected the~~ animal and receiving in the database of the central database processing resource, ~~and genetic~~ genotypic data relating to the breed of animal and the genetic background of the animal.

29. (Amended Once) A computer-readable medium having stored thereon instructions for a computer to access the medium comprising:  
instructions to access data on the medium,  
a database on the medium related to genotypic data of a non-human ~~an~~ animal,  
and  
a database on the medium related to ~~the~~ phenotypic data of the animal.



30. (Amended Once) The medium as claimed in claim 29 wherein the phenotypic data includes biological laboratory test data relating to a health assessment of a ~~selected~~ subject ~~the animal and genetic data related to the selected subject animal.~~

31. (Amended Once) The medium of claim 30, including analysis data of the ~~health assessment data of a selected animal and the genetic~~ phenotypic and genotypic data related to the animal, and a report based on the analysis ~~data, the health assessment data of the animal and the genetic data.~~

32. (Amended Once) The medium of claim 30, including data related to the interpretation of the phenotypic and the genotypic data of the animal, wherein the interpreted data ~~a combination of the genetic data of animals with health assessment data of animals, and data being to permit an analysis predicting~~ predict health, disease probabilities, and disorder probabilities and/or longevity of selected ~~the animals.~~

33. (Amended Once) The medium of claim 29, including data for permitting communication between a remote user and a central database processing resource through a computer network, data for permitting access through approved access codes, such data selectively including a credit card information of a user prior to providing a communication access to the database storage system ~~of at least one of health assessment data and/or genetic data~~ phenotypic or genotypic data.

34. (Amended Once) A system for reporting the analysis of the ~~combined~~ phenotypic data and genotypic data of an a non-human animal comprising:

a computer based communications network,

a computer at a central database processing resource provider to receive through the network, phenotypic data for ~~an the~~ the animal, the phenotypic data including physical characteristics and health assessment data, and genotypic data about the animal the genotypic data including genetic background, genomic mapping and genetic screening data,

a screen for monitoring, using a computer, both the phenotypic data of the animal, and the genotypic data about the animal,

a computer for analyzing the phenotypic data and the genotypic data based on predetermined characteristics, and

a computer for receiving, through the network, the analysis.

35. (Amended Once) The system of claim 34, including receiving in a database of a central database processing resource, phenotypic data relating to ~~the~~ a health assessment of ~~a selected~~ the animal and receiving in the database of the central data processing resource, ~~genetic~~ genotypic data relating to the genomic map, genetic background, and genetic screening information about the animal.

36. (Amended Once) The system of claim 34, including permitting a remote user of the network to pay for an analysis of ~~the health assessment and genetic data~~ phenotypic and genotypic data through the computer network, and including ~~—~~permitting the computer communications network to submit the report to the remote user after receipt of the payment.

**Appendix B**

**Claims pending as of August 8, 2002**

1. A method of communicating phenotypic and genotypic data related to a non-human animal, the data communication being between a central database processing resource and at least one remote user, the method comprising the steps of:

receiving an access request message from a remote user via a communications link;

transmitting an access enabling message to the remote user via the communications link wherein the remote user is authorized to access the database, the access enabling message permitting the remote user to access the database and access designated data from the database, the data in the database including phenotypic and genotypic data related to the animal;

analyzing the phenotypic and genotypic data related to the animal;

compiling a report based on the analysis of the phenotypic and genotypic data of the animal; and

transmitting the compiled report of the phenotypic and genotypic data of the animal to the remote user.

2. The method of claim 1, comprising the steps of verifying that the access to the database is authorized.

3. The method of claim 1, including periodically updating the database with at least one phenotypic or genotypic data about the animal.

5. The method of claim 1, comprising the step of storing the report in the central database resource.

6. The method of claim 1, including controlling access to the central database resource, and wherein data in the database is accessible to selected multiple remote clients.

7. The method of claim 6, including the step of verifying that selected remote clients are authorized to access the database or selected data in the database.

8. The method of claim 1, including interpreting the phenotypic and genotypic data the animal thereby predicting health, disease probabilities, disorder probabilities or longevity of the animal.

9. The method of claim 1, including sending an access request message from the remote user via a communications link, and the communications link is selectively a computer network.

10. The method of claim 1, including receiving a biological specimen result of the animal, storing, retrieving, comparing, and analyzing the biological specimen thereby obtaining phenotypic data of the animal.

11. The method of claim 1, including encrypting the phenotypic and genotypic data.

12. The method of claim 1, including the steps of communicating between a remote user and the central database processing resource through a computer network, providing credit card information of the remote user prior to providing at least one of phenotypic or genotypic data of the animal and transferring such data to the remote user after charging a credit card for such data.

13. The method of claim 1, including transferring money electronically via a telecommunications line between respective financial entities related to the remote user and to an operator of the central database, and, after transfer of money electronically, providing data from the central database to the remote user.

14. A method of viewing phenotypic and genotypic data related to a non-human animal comprising the steps of:

viewing, using a computer, both phenotypic data and genotypic data for a non-human animal,

analyzing, using a computer, the phenotypic data and the genotypic data based on predetermined characteristics; and

reporting the analysis of the phenotypic data and genotypic data.

15. The method of claim 14, including receiving in a database of a central database processing resource related to the computer, data relating to the phenotype data of the animal and receiving in the database of the central data processing resource, genotypic data relating to the breed of the animal and background of the animal.

16. The method of claim 14, wherein a remote user of a database including phenotypic data and genotypic data pays for at least one of an analysis of phenotypic or genotypic data through a computer network, and including submitting the report to a remote user after receipt of the payment.

17. The method of claim 14, including submitting a health assessment to a database related to the computer, the health assessment being selected by a remote user.

18. The method of claim 14, wherein the reporting is to a remote user, the remote user being at a site removed from a central database related to the computer and using a

communication link between the central database and the remote user, the communication link including an Internet link.

19. Apparatus for communicating phenotypic and genotypic data related to a non-human animal, comprising

a computer communication network for data communication being between a central database processing resource and at least one remote user,

means for receiving an access request message from a remote user via the communications link;

means for transmitting an access enabling message to the remote user via the communications link wherein the remote user is authorized to access the database, the access enabling message permitting the remote user to access the database and access designated data from the database, the data in the database including phenotypic and genotypic data related to the animal;

means for analyzing the phenotypic and genotypic data related to the animal;

means for compiling a report based on the analysis phenotypic and genotypic data of the animal; and

means for transmitting the compiled report of the phenotypic and genotypic data of the animal to the remote user.

20. The apparatus of claim 19, comprising means for verifying that the access to the database is authorized.

22. The apparatus of claim 19, comprising means for storing the report in the central database processing resource.

23. The apparatus of claim 19, including means for controlling access to the central database processing resource to selected multiple remote clients.

24. The apparatus of claim 19, including means for interpreting the phenotypic and genotypic data, and means to permit an analysis of the interpreted data thereby predicting health, disease probabilities, disorder probabilities or longevity of the animal.

25. The apparatus of claim 19, including means of communicating between a remote user and the central database processing resource through a computer network, means for providing credit card information of the remote user prior to providing at least one of phenotypic or genotypic data and transferring such data to the remote user after charging a credit card for such data.

26. Apparatus comprising

a screen for monitoring, using a computer, both phenotypic data and genotypic data for a non-human animal,

a computer for analyzing the phenotypic data and the genotypic data based on predetermined characteristics; and

a communications network for reporting the analysis of the phenotypic data and genotypic data.

27. The apparatus of claim 26, including means for receiving in a database of a central database processing resource, phenotypic data relating to the health assessment of the animal and receiving in the database of the central database processing resource, genotypic data relating to the breed of animal and the genetic background of the animal.

28. The apparatus of claim 26, including means for permitting a remote user of the database to pay for an analysis of the health profile and genetic screening tests through a computer network, and including a computer communication network for submitting the report to a remote user after receipt of the payment.

29. A computer-readable medium having stored thereon instructions for a computer to access the medium comprising:

instructions to access data on the medium,

a database on the medium related to genotypic data of a non-human animal, and

a database on the medium related to phenotypic data of the animal.

30. The medium as claimed in claim 29 wherein the phenotypic data includes biological laboratory test data relating to a health assessment of a the animal.

31. The medium of claim 30, including analysis data of the phenotypic and genotypic data related to the animal, and a report based on the analysis data.

32. The medium of claim 30, including data related to the interpretation of the phenotypic and the genotypic data of the animal, wherein the interpreted data predict health, disease probabilities, disorder probabilities or longevity of the animal.

33. The medium of claim 29, including data for permitting communication between a remote user and a central database processing resource through a computer network, data for permitting access through approved access codes, such data selectively including a credit card information of a user prior to providing a communication access to the database storage system of at least one of phenotypic or genotypic data.

34. A system for reporting the analysis of phenotypic data and genotypic data of a non-human animal comprising:

a computer based communications network,

a computer at a central database processing resource provider to receive through the network, phenotypic data for the animal, the phenotypic data including physical characteristics and health assessment data, and genotypic data about the animal the genotypic data including genetic background, genomic mapping and genetic screening data,

a screen for monitoring, using a computer, both the phenotypic data of the animal, and the genotypic data about the animal,

a computer for analyzing the phenotypic data and the genotypic data based on predetermined characteristics, and

a computer for receiving, through the network, the analysis.

35. The system of claim 34, including receiving in a database of a central database processing resource, phenotypic data relating to a health assessment of the animal and receiving in the database of the central data processing resource, genotypic data relating to the genomic map, genetic background, and genetic screening information about the animal.

36. The system of claim 34, including permitting a remote user of the network to pay for an analysis of phenotypic and genotypic data through the computer network, and including permitting the computer communications network to submit the report to the remote user after receipt of the payment.

37. The method of claim 9, wherein the computer network includes the Internet.